# ALMEMO® Network technology

# ALMEMO® PC connection using USB data cable ZA 1919 DKU RS232 data cable, type ZA 1909 DK5, USB adapter cable ZB 1909 USB



- ALMEMO®-USB data cable for data connection between an ALMEMO® device and a PC with a USB interface
- ALMEMO® RS232 data cable with a DSUB socket for data connection between an ALMEMO® device and a PC with a COM interface
- ALMEMO® optic fiber cable (RS232 or with adapter to USB) for absolute electrical isolation and extensive protection against lightning.

# Types:

USB data cable, electrically isolated, maximum 115.2 kbaud, cable length 1.5 meters, including CD with Windows driver

As above but cable length 5 meters

RS232 data cable electrically isolated, max. 115.2 kbaud, Current consumption: approx. 1 mA, cable length: 1.5 m

As above, but cable lengths 5m / 10m / 15m

RS232 data cable with optic fiber, max. 115.2 kbaud, Cable length 1,5 m

Longer optic fiber (up to 50 m) for interiors, Duplex plastic 2.2 x 4.3mm, per meter Converter, USB to RS232, 9-pin DSUB for ALMEMO® data cable ZA1909DKx,

including WINDOWS driver

# Order no.

ZA1919DKU ZA1919DKU-05

ZA1909DK5

ZA1909DK5-05 /-10 /-15

ZA1909DKL LL2243L

ZB1909USB

# ALMEMO® PC connection using Ethernet data cable ZA 1945 DK



- For connecting almost any ALMEMO® measuring instrument to an Ethernet PC network.
- Linking up to the Internet now possible.
- Terminal operation using our AMR-Control software, available free-of-charge.
- Device-Installer configuration software also included on the AMR CD.
- Measured data acquisition via several Ethernet modules using our Win-Control software. (Version SW5600WC2 and above, see chapter Software).

#### Technical data

Ethernet:	Socket RJ45 (10/100 base-T) Automatic switchover 10 / 100 MHz	Power supply	12 V DC via measuring instrument (suitable mains supply unit recommended)
ALMEMO®	ALMEMO® connector for socket A1	Current consumption <60 mA (10 MHz), <90 mA (100 MHz)	
	Baud rate standard 9600 bd, max. 115.2 kbd (can be changed via Device-Installer and browser)		

# **Accessories**

Patch cable RJ45, plug / plug, 2 meters

Order no. ZB1904PK2

Type Order no.

Ethernet data cable, RJ45 socket on ALMEMO® connector, cable length 1.5 meters

**ZA1945DK** 

# Data cable for configuring digital ALMEMO® D6 / D7 sensors

Types

Order no.

ALMEMO® USB adapter cable length 1.5 meters

for connecting an ALMEMO® D6 sensor to the USB port on a PC (power supply via USB)

ZA1919AKUV

# ALMEMO® Network technology

# ALMEMO® Network Interface Cables ZA 1999 NK5



The device network will be blocked if the measuring instrument fails to operate. No further peripheral devices can be connected (analog output, alarm relay etc.)

- Especially suitable for short distances and mobile measuring
- Up to 100 ALMEMO® measuring instruments can be networked.

# **Advantages:**

- · Devices can be quickly and easily interconnected and net-
- Low power consumption (approx. 1 mA) without additional power supply.
- You can easily assemble the network cable yourself, up to 50m in length, using just two single network connectors ZA1999FS5 (a couple) and one four-wire cable.

**Types** Order no.

Network cable for cascading several devices for baud rates up to 57.6 kbaud current loop, electrically isolated, 1.5 m long As above, but cable lengths 5m / 10m / 15m

2 Network connectors (a couple) with screw terminals for local self-assembly

ZA1999NK5 ZA1999NK5 -05/ -10 / -15/ -xx

ZA1999FS5

# ALMEMO® Network Interface Cables with Fiber Optics ZA 1999 NKL



The device network will be blocked if the measuring instrument fails to operate.

No further peripheral devices can be connected (analog output, alarm relay etc.)

# Uses:

- Especially suitable for safe and reliable data transmission in industrial environments with high levels of interference.
- Up to 10 ALMEMO® measuring instruments can be networked (at 9600 baud, double this number, if the transmission rate is halved).

### **Advantages:**

- Devices can be quickly and easily interconnected and net-
- No EMC problems, highest possible immunity to interference, absolute electrical isolation of the instruments - even under high voltages.
- No additional voltage supply is required.
- You can easily assemble the network cable with plastic optic fiber yourself, up to 50m in length, using just two single network connectors ZA1999FSL, without needing any special tools.

# **Types**

Network cable with optic fiber for cascading several devices 1.5 m long for baud rates up to 57.6 kbaud

As above, but cable lengths 5m / 10m / 15m

Longer optic fiber cable for interiors, Duplex plastic 2.2 x 4.3 mm

Network connector with optic fiber converter for local self assembly

# Order no.

ZA1999NKL

ZA1999NKL -05/ -10 / -15/ -xx LL2243L (please specify length L) ZA1999FSL